

What Is Claimed Is:

- B17 Sub
a3
1. A method for facilitating access to a plurality of applications that require passwords, comprising:
- receiving a request for a password from an application running on a remote computer system, the request being received at a local computer system;
- authenticating the request as originating from a trusted source;
- using an identifier for the application to look up the password for the application in a password store containing a plurality of passwords associated with the plurality of applications; and
- if the password exists in the password store, sending the password or a function of the password to the application on the remote computer system.
2. The method of claim 1, wherein the request for the password includes computer code that when run on the local computer system requests the password on behalf of the application on the remote computer system.
3. The method of claim 2, wherein the computer code is in the form of a JAVA applet that runs on a JAVA virtual machine on the local computer system.
4. The method of claim 3, wherein sending the password or the function of the password to the application to the remote computer system involves:
- communicating the password to the JAVA applet; and
- allowing the JAVA applet to forward the password to the application on the remote computer system.

1 5 The method of claim 3, wherein the JAVA applet is a signed
2 JAVA applet, and wherein authenticating the request includes authenticating the
3 JAVA applet's certificate chain.

1 6. The method of claim 1, wherein authenticating the request involves
2 authenticating a creator of the request.

1 7. The method of claim 1, wherein authenticating the request involves
2 authenticating the remote computer system that sent the request.

1 8. The method of claim 1, further comprising, if the password store is
2 being accessed for the first time,
3 prompting a user for a single sign on password for the password store; and
4 using the single sign on password to open the password store.

1 9. The method of claim 8, wherein if a time out period for the
2 password store expires,
3 prompting the user again for the single sign on password for the password
4 store; and
5 using the single sign on password to open the password store.

1 10. The method of claim 1, wherein if the password store is being
2 accessed for the first time, the method further comprises authenticating the user
3 through an authentication mechanism, wherein the authentication mechanism can
4 include:
5 a smart card;

1 a biometric authentication mechanism; and
2 a public key infrastructure.

1 11. The method of claim 1, wherein if the password does not exist in
2 the password store, the method further comprises:
3 adding the password to the password store; and
4 sending the password to the application on the remote computer system.

1 12. The method of claim 11, wherein adding the password to the
2 password store further comprises automatically generating the password.

1 13. The method of claim 11, wherein adding the password to the
2 password store further comprises asking a user to provide the password.

1 14. The method of claim 1, further comprising decrypting data in the
2 password store prior to looking up the password in the password store.

1 15. The method of claim 1, wherein the password store is located on a
2 second remote computer system.

1 16. The method of claim 1, wherein the password store is located on
2 one of:
3 a local smart card;
4 a floppy disk; and
5 a memory button.

1 17. The method of claim 1, further comprising:

1 receiving a request to change the password from the application on the
2 remote computer system;
3 automatically generating a replacement password;
4 storing the replacement password in the password store; and
5 forwarding the replacement password or the password function to the
6 application on the remote computer system.

1 18. A computer-readable storage medium storing instructions that
2 when executed by a computer cause the computer to perform a method for
3 facilitating access to a plurality of applications that require passwords, the method
4 comprising:
5 receiving a request for a password from an application running on a
6 remote computer system, the request being received at a local computer system;
7 authenticating the request as originating from a trusted source;
8 using an identifier for the application to look up the password for the
9 application in a password store containing a plurality of passwords associated with
10 the plurality of applications; and
11 if the password exists in the password store, sending the password or a
12 function of the password to the application on the remote computer system.

1 19. The computer-readable storage medium of claim 18, wherein the
2 request for the password includes computer code that when run on the local
3 computer system requests the password on behalf of the application on the remote
4 computer system.

1 20. The computer-readable storage medium of claim 19, wherein the
2 computer code is in the form of a JAVA applet that runs on a JAVA virtual
3 machine on the local computer system.

1 21. The computer-readable storage medium of claim 20, wherein
2 sending the password or the function of the password to the application to the
3 remote computer system involves:
4 communicating the password to the JAVA applet; and
5 allowing the JAVA applet to forward the password to the application on
6 the remote computer system.

1 22. The computer-readable storage medium of claim 20, wherein the
2 JAVA applet is a signed JAVA applet, and wherein authenticating the request
3 includes authenticating the JAVA applet's certificate chain.

1 23. The computer-readable storage medium of claim 18, wherein
2 authenticating the request involves authenticating a creator of the request.

1 24. The computer-readable storage medium of claim 18, wherein
2 authenticating the request involves authenticating the remote computer system
3 that sent the request.

1 25. The computer-readable storage medium of claim 18, wherein the
2 method further comprises, if the password store is being accessed for the first
3 time,
4 prompting a user for a single sign on password for the password store; and
5 using the single sign on password to open the password store.

1 31. The computer-readable storage medium of claim 18, wherein the
2 method further comprises decrypting data in the password store prior to looking
3 up the password in the password store.

1 32. The computer-readable storage medium of claim 18, wherein the
2 password store is located on a second remote computer system.

1 33. The method of claim 18, wherein the password store is located on
2 one of:

3 a local smart card;

4 a floppy disk; and

5 a memory button.

1 34. The computer-readable storage medium of claim 18, wherein the
2 method further comprises:

3 receiving a request to change the password from the application on the
4 remote computer system;

5 automatically generating a replacement password;

6 storing the replacement password in the password store; and

7 forwarding the replacement password or the password function to the

8 application on the remote computer system.

1 35. An apparatus that facilitates accessing a plurality of applications
2 that require passwords, comprising:

3 a receiving mechanism that receives a request for a password from an
4 application running on a remote computer system, the request being received at a
5 local computer system;

6 an authentication mechanism that authenticates the request as originating
7 from a trusted source;

8 a lookup mechanism that uses an identifier for the application to look up
9 the password for the application in a password store containing a plurality of
10 passwords associated with the plurality of applications; and

11 a forwarding mechanism that sends the password to the application on the
12 remote computer system if the password exists in the password store.

1 36. The apparatus of claim 35, wherein the request for the password
2 includes computer code that when run on the local computer system requests the
3 password on behalf of the application on the remote computer system.

1 37. The apparatus of claim 36, wherein the computer code is in the
2 form of a JAVA applet that runs on a JAVA virtual machine on the local
3 computer system.

1 38. The apparatus of claim 37, wherein the forwarding mechanism is
2 configured to send the password to the application on the remote computer system
3 by:

4 communicating the password to the JAVA applet; and

5 allowing the JAVA applet to forward the password to the application on
6 the remote computer system.

1 39. The apparatus of claim 37, wherein the JAVA applet is a signed
2 JAVA applet, and wherein the authentication mechanism is configured to
3 authenticate a certificate chain.

1 40. The apparatus of claim 35, wherein the authentication mechanism
2 is configured to authenticate a creator of the request.

1 41. The apparatus of claim 35, wherein the authentication mechanism
2 is configured to authenticate the remote computer system that sent the request.

1 42. The apparatus of claim 35, wherein if the password store is being
2 accessed for the first time, the lookup mechanism is configured to:
3 prompt a user for a single sign on password for the password store; and to
4 use the single sign on password to open the password store.

1 43. The apparatus of claim 42, wherein if a time out period for the
2 password store expires, the lookup mechanism is configured to:
3 prompt the user again for the single sign on password for the password
4 store; and to
5 use the single sign on password to open the password store.

1 44. The apparatus of claim 35, wherein if the password store is being
2 accessed for the first time, the lookup mechanism is configured to authenticate the
3 user through an authentication mechanism, wherein the authentication mechanism
4 can include:
5 a smart card;
6 a biometric authentication mechanism; and

1 a public key infrastructure.

1 45. The apparatus of claim 35, further comprising an insertion
2 mechanism, wherein if the password does not exist in the password store the
3 insertion mechanism is configured to:

4 add the password to the password store; and to
5 send the password to the application on the remote computer system.

1 46. The apparatus of claim 45, wherein the insertion mechanism is
2 additionally configured to automatically generate the password.

1 47. The apparatus of claim 45, wherein the insertion mechanism is
2 additionally configured to ask a user to provide the password.

1 48. The apparatus of claim 35, further comprising a decryption
2 mechanism that is configured to decrypt data in the password store.

1 49. The apparatus of claim 35, wherein the password store is located
2 on a second remote computer system.

1 50. The method of claim 35, wherein the password store is located on
2 one of:

3 a local smart card;
4 a floppy disk; and
5 a memory button.

1 51. The apparatus of claim 35, further comprising a password changing
2 mechanism that is configured to:
3 receive a request to change the password from the application on the
4 remote computer system;
5 automatically generate a replacement password;
6 store the replacement password in the password store; and to
7 forward the replacement password to the application on the remote
8 computer system.

*add
a4*